

CLAIMS

What is claimed is:

1. An outsole comprising:
 - a forward portion;
 - a rearward portion;
 - a torsion member having means for rotationally coupling the forward portion to the rearward portion at a pivot just behind a transverse arch of a user;
 - the torsion member including a plurality of shock absorbing angled stabilizer rods, the stabilizer rods having proximal ends telescopically disposed within channels defined in the rearward portion to provide a reciprocating movement therein,
 - wherein the forward and rearward portions are operatively connected and stabilized to freely allow independent and relative movement of the forward and rearward portions rotationally and about the pivot while walking.
2. The outsole of claim 1, wherein the coupling means comprises:
 - a housing having elongated slots for receiving distal ends of the stabilizer rods;
 - a projecting member extending from the housing, a distal end of the projecting member having a rounded protrusion; and
 - a connector disposed in a recess of the forward portion, the connector having defined therein an internal chamber of a size and configuration for accepting the projecting member.
3. The outsole of claim 1, wherein the reciprocating movement of the stabilizer rods within the channels of the rearward portion is between about 0.24 inch and 0.28 inch.
4. The outsole of claim 1, wherein the stabilizer rods comprise two rods, each positioned at an angle of between about 1 to 15 degrees from a longitudinal axis.

5. The outsole of claim 1, wherein the stabilizer rods comprise two rods, each positioned at an angle of between about 3 to 10 degrees from a longitudinal axis.
6. The outsole of claim 1, wherein the forward section is comprised of a first flexible member connecting a toe piece to one side of a mid-foot piece, and a second flexible member connecting the opposing side of the mid-foot piece to a forefoot piece.
7. The outsole of claim 6, wherein the first flexible member is located substantially below the distal phalanges of a user.
8. The outsole of claim 6, wherein the second flexible member is located substantially below the metatarsal bones of a user.
9. The outsole of claim 6, wherein the flexible members are softer than the toe, mid-foot and forefoot pieces.
10. The outsole of claim 6, wherein each of the toe piece, mid-foot piece and forefoot piece materials have Shore A hardness of greater than about 75.
11. The outsole of claim 6, wherein the flexible member material has a Shore A hardness of less than about 85.
12. The outsole of claim 6, wherein the toe piece, the mid-foot piece, the forefoot piece, and the heel section materials have a Shore A hardness of greater than about 85, and the material of the flexible members have a Shore A hardness of about 70.
13. The outsole of claim 12, wherein the heel section material has a Shore A hardness of greater than about 75.

14. The outsole of claim 12, wherein the ball-and-socket connection is configured to allow relative movement of the forward and rearward portions during walking or swinging of a golf club.

15. The outsole of claim 1, wherein are the forward and rearward portions comprise extended second layers to provide increased traction and area of contact with the turf, and therefore greater stability and balance for the user.

16. An outsole comprising:
a forward portion;
a rearward portion;
a torsion member having means for rotationally coupling the forward portion to the rearward portion at a pivot just behind a transverse arch of a user;
the forward and the rearward portions having second layers that extend beyond the normal contour of the outsole,
wherein the extended second layers provide increased traction and area of contact with the turf, and therefore greater stability and balance to the user.

17. The outsole of claim 16, wherein the coupling means comprises:
a plurality of shock absorbing angled stabilizer rods, the rods having proximal ends telescopically disposed within channels defined in the rearward portion to provide a reciprocating movement therein;
a housing having elongated slots for receiving distal ends of the stabilizer rods;
a projecting member extending from the housing, a distal end of the projecting member having a rounded protrusion;
a V-shaped support section juxtaposed against the rearward portion, the support section having openings defined therein for passage of the rods;
wherein the forward and rearward portions are operatively connected and stabilized to freely allow independent and relative movement of the forward and rearward portions about the pivot while walking.

- 18.** The outsole of claim 16, wherein the forward section is comprised of a first flexible member connecting a toe piece to one side of a mid-foot piece, and a second flexible member connecting the opposing side of the mid-foot piece to a forefoot piece.
- 19.** The outsole of claim 18, wherein the first flexible member is located substantially below the distal phalanges of a user.
- 20.** The outsole of claim 18, wherein the second flexible member is located substantially below the metatarsal bones of a user.
- 21.** The outsole of claim 18, wherein the flexible members are softer than the toe, mid-foot and forefoot pieces.
- 22.** The outsole of claim 18, wherein each of the toe piece, mid-foot piece and forefoot piece materials have Shore A hardness of greater than about 75.
- 23.** The outsole of claim 18, wherein the flexible member material has a Shore A hardness of less than about 85.
- 24.** The outsole of claim 18, wherein the toe piece, the mid-foot piece, the forefoot piece, and the rearward portion materials have a Shore A hardness of greater than about 85, and the material of the flexible members have a Shore A hardness of about 70.
- 25.** The outsole of claim 18, wherein the rearward portion material has a Shore A hardness of greater than about 75.
- 26.** The outsole of claim 17, wherein the stabilizer rods comprise two rods each positioned at an angle of between about 1 to 15 degrees from a longitudinal axis.

27. The outsole of claim 17, wherein the stabilizer rods may alternately slide within the channels a distance between 0.001 inch to about 1.0 inch.

28. The outsole of claim 17, wherein the stabilizer rods have a length between about 57 mm to about 60 mm.